## (19) World Intellectual Property Organization

International Bureau



## 

(43) International Publication Date 15 January 2004 (15.01.2004)

## (10) International Publication Number WO 2004/005498 A1

(51) International Patent Classification7: 15/63, C12Q 1/70, A61K 39/29

C12N 7/01,

1517 Bayou Shore Dr., Galveston, TX 77551 (US). RI-JNBRAND, Rene [NL/US]; 1427 Winne, Galveston, TX

L.L.P., 600 Congress Avenue, Suite 2400, Austin, TX

(21) International Application Number:

PCT/US2003/021002

2 July 2003 (02.07.2003) (22) International Filing Date:

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

10/189,359

3 July 2002 (03.07.2002)

(63) Related by continuation (CON) or continuation-in-part (CIP) to earlier application:

US Filed on

10/189,359 (CON) 3 July 2002 (03.07.2002)

- (71) Applicants (for all designated States except US): BOARD OF REGENTS, THE UNIVERSITY OF TEXAS SYS-TEM [US/US]; 201 West 7th St., Austin, TX 78701 (US). INSTITUT PASTEUR [FR/FR]; 25-28 rue du Docteur Roux, F-75724 Paris Cedex 15 (FR).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARTIN, Annette [FR/FR]; 201 rue d'Alesia, F-75014 Paris (FR). SANGAR, David, V. [GB/GB]; 23A Coventry Road, Burbage, Leicestershire LE10 2HL (GB). LEMON, Stanley, M. [US/US];

77550 (US). (74) Agent: SHISHIMA, Gina, N.; Fulbright & Jaworski

- (81) Designated States (national): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW,
  - MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (regional): ARIPO patent (GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

## **Published:**

78701 (US).

with international search report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: CHIMERIC GB VIRUS B (GBV-B)

(57) Abstract: The present invention relates generally to the fields of biochemistry, molecular biology, and virology. More particularly, it relates to the identification of GB virus B (GBV-B)/HCV chimeras. The invention involves nucleic acid constructs and compositions encoding GBV-B/HCV chimera, including at least part of a 5' NTR derived from a HCV 5' NTR. This construct, and chimeric versions of it, may be employed to study GBV-B and related hepatitis family members, such as hepatitis C virus. The invention thus includes methods of preparing GBV-B/HCV chimeric sequences, constructs, and viruses, as well as methods of employing these compositions.

